

Comments of George Bednekoff, AC5WO, regarding GN Docket No. 25-133
Delete Delete Delete.

Please modify FCC rule 2.815 (b) External radio frequency power amplifiers, limiting the frequency range covered to reduce its impact on the Amateur Radio Service. The goal is to allow small volume manufacturing and sale of specialized external radio frequency power amplifiers for Amateur Radio frequencies below 21.45 MHz and for the 50 – 54 MHz band without the additional cost of certification. An Amateur Radio station operating on battery power can achieve longer operating times by using a transmitter designed for best efficiency at low power, only using an external amplifier when necessary, instead of reducing the power output of a higher power transmitter. Please change 2.815 (b) from “capable of operation on any frequency of frequencies below 144 MHz” to “capable of operation in the frequency band 24 – 35 MHz”. Please modify 2.815 (b) (1) to change “capable of amplification in the frequency band 26 – 28 MHz “ to “capable of amplification in the frequency band 26.5 – 27.65 MHz.” This narrower frequency range is sufficient to make the external radio frequency power amplifier undesirable for illegal use for the Citizens Band Radio Service including the most commonly used frequencies above and below CB frequencies while reducing the complexity and power consumption of certified amplifiers for the 24.89 – 24.99 and 28.0 – 29.7 MHz Amateur Radio bands. Please change 2.815 (b) (2) from “capable of easy modification to permit its use as an amplifier in the frequency band 26 – 28 MHz. to “capable of easy modification to permit its use as an amplifier in the frequency band 26.5 – 27.65 MHz.” A modification requiring the addition of specific radio frequency components like several inductors and capacitors should be considered not easy.

Please modify FCC rule 95.991 CBRS marketing limitations to be consistent with the proposed changes to 2.815 above. Change 95.991 (a) from “operation below 144 MHz” to “operation in the frequency band 24 – 35 MHz.”

Please modify FCC rule 97.315 Certification of external RF power amplifiers to be consistent with the proposed changes to 2.815 above. Change 97.315 (a) “No amplifier capable of operation below 144 MHz” to “capable of operation in the frequency band 24 – 35 MHz”. Please modify 97.317 Standards for certification of external RF power amplifiers as follows. For 97.317 (a) (3) change “Exhibit no amplification (0 dB gain) between 26 MHz

and 28 MHz.” to “Exhibit no amplification (0 dB gain) between 26.5 MHz and 27.65 MHz. For 97.317 (b) (2) change “The amplifier can be easily modified to operate on frequencies between 26 MHz and 28 MHz.” to “The amplifier can be easily modified to operate on frequencies between 26.5 MHz and 27.65 MHz.

Please delete Anti-Drug Abuse Act of 1988 Certification requirements from FCC technical requirements wherever possible. The engineer capable of organizing the required technical information is very unlikely to have specific knowledge of the drug policy of the companies involved. He’s just going through the motions of adding the correct boilerplate language. Considering the changes in state level drug laws, it’s likely that the boilerplate language he’s forced to add is inconsistent with reality. Specifically, delete 2.911 (d) (2) and 2.932 (d).

Please delete FCC rule 15.121 Scanning receivers and frequency converters used with scanning receivers. This rule is outdated with the end of the use of analog FM in the Cellular Radiotelephone Service. I have an Amateur Radio license to transmit in the 902 – 928 MHz band, but several Amateur Radio transceivers I own specifically block reception on part of this band to avoid the possibility of violating the 15.121 (b) image rejection requirement.

Please delete FCC rule 97.121 Restricted operation. This rule that would allow restricting the hours of operation of amateur radio stations makes no sense in 2025 in view of the decline of scheduled television and over the air television reception. Even when prime time scheduled over-the-air television viewing was popular, interference problems were generally solved with the addition of a filter between the television antenna and the television receiver.

Please modify FCC rules to allow one certified transmitter to be legally used on more than one licensed radio service if it meets the most stringent technical requirements for each radio service. In these cases, the individual with FCC licenses is individually responsible with following the restrictions of their license separate from transmitter capability. The specific problem is that requiring separate transceivers for multiple radio services is incompatible with the limited space available in the interior of a vehicle or on a person’s belt. In the past individuals could purchase transceivers certified under both Part 90 Land Mobile Radio Service and Part 95 Subpart E General Mobile Radio Service and have them programmed for any Land Mobile, GMRS, and Amateur Radio frequencies that they were licensed to use. After narrowbanding in the Land Mobile Radio Service, the Part 90 certified

transmitters that could also easily meet the technical requirements of GMRS have become incompatible with 5 kHz deviation FM used in GMRS and Amateur Radio. Normal Americans react to this frustrating situation by illegally using non-certified Amateur Radio equipment across multiple radio services. It would be better if individuals were using transmitters certified to meet the 2.5 ppm frequency accuracy and out-of-band emissions requirements of Part 90 that were also capable of 5 kHz deviation FM when programmed for non-Part 90 frequencies.

Please modify FCC rule 96.41 (b) Power limits for End User Device for the Citizens Broadband Radio Service to be better compatible with fixed point-to-multipoint operation. The maximum EIRP limit of 23 dBm/10 MHz for the system uplink is too low relative to the system downlink and the work around of applying SAS to the subscriber side is unnecessarily expensive. One way to resolve this with relatively low probability of causing additional interference would be to separate the power limit into a conducted limit around 23 or 24 dBm, limiting Total Radiated Power, with a reasonable antenna gain limit around 6 dBi. FCC rules 15.407 for Unlicensed National Information Infrastructure Devices, Wi-Fi, provide some precedents for a separate conducted power limit along with more generous EIRP limits for indoor devices. End user devices installed indoors could use antenna gain to help overcome building penetration loss without increasing interference potential outside of the building. Outdoor use of antennas with up to 6 dBi net gain could be restricted to professionally installed devices with geographic restrictions on the installations to limit potential interference.